Shoreham Hill Bridge
Rock Creek and Potomac Parkway, spanning Rock Creek,
1 mile north of P Street, NW
Rock Creek Park
Washington
District of Columbia

HAER No. DC-10

HAER DC, WASH, 572-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Washington, DC 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

SHOREHAM HILL BRIDGE

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Location:

Rock Creek and Potomac Parkway 1.0 miles north

of P Street spanning Rock Creek, Washington,

D.C.

UTM: 18/322008/4309693 Quad: Washington West

Date of Construction:

1938

Engineer:

Bureau of Public Roads

United States Department of Agriculture

Present Owner:

Rock Creek Park

National Capital Region National Park Service Department of the Interior

Present Use:

Vehicular bridge

Significance:

The Shoreham Hill Bridge is a typical parkway structure of the 1930s. Its design, materials and construction are representative of parkway

bridges in National Parks.

Historian:

Marcia M. Miller, 1988

After years of proposals, Rock Creek Park was created by an Act of Congress on September 27, 1890. Containing appropriations to purchase 1605.9 acres of land running along Rock Creek from the Maryland border to the Zoological Park to be preserved as a natural park, the act defined the purpose of the park as providing "for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition as nearly as possible." At the time, the United States government had designated only two other such areas as natural parks. The Commissioners of the District of Columbia and Chief of Engineers of the United States Army jointly controlled the park (although at this time the military exercised more authority). Their duty was to lay out paths and roads for public use. After purchasing the land, however, Congress did not provide for any improvements to the park for the next seven years.

Since Congress did not appropriate money for work within the park, chain gangs (comprised of District prisoners) completed the improvements to paths and roads. In 1898, Congress finally approved money to create a road running the length of the park. Beach Drive followed the natural course of the path along the creek. This became, and remains today, the main thoroughfare through the park.

The park remained under the Board of Control of Rock Creek Park until 1918. At this time it became part of the National Park system in the District of Columbia with duties transferred to the jurisdiction of the Office of Public Buildings and Grounds. The officer in charge of the park still reported to the Army Chief of Engineers. In 1925, the new Office of Public Buildings and Public Parks of the National Capital administered the Park after the Office of Public Buildings and Grounds was abolished. Then, in 1933 President Franklin Roosevelt abolished this office, along with the Rock Creek and Potomac Parkway Commission (established to complete a parkway along the lower end of the creek). The Office of National Parks, Buildings, and Reservations in the Department of the Interior (a temporary name for the National Park Service) gained control of the park at this time. Rock Creek Park thus became one of the National Capital Parks.

¹Mackintosh, Barry. Rock Creek Park An Administrative History. History Division, National Park Service, Department of the Interior, Washington, D.C. 1985, p. 17.

 $[\]frac{2}{\text{ibid}}$. Yellowstone and Sequoia National Parks were the first to be designated as such.

³Beach Drive is named in honor of Col. Lansing H. Beach, Army Corps of Engineers, U.S.A. who served as Secretary of the Board of Control of Rock Creek Park and later as the Bridge Commissioner for the District of Columbia. He is responsible for the early improvements to Rock Creek Park.

The land south of the park, from the Zoological Park to the Potomac River, presented a vast dumping ground as far back as the late nineteenth century. Congress wanted to fill in the valley to rid the city of what was becoming an open dumping ground and to create easier access between Georgetown and Washington. Although many proponents lobbied for this plan, no action occurred during the next decade. In 1900, the Army Chief of Engineers submitted a report to Congress on "a suitable connection between the Potomac and the Zoological parks."4 His plan, however, focused on the Mall area and completely ignored the section of the creek valley below N Street. The 1902 McMillan Commission report recognized the need for some resolution to the conflict of filling in the valley versus leaving it open. The Commission strongly approved of the open valley plan for its economy, convenience, and The Washington Board of Trade also favored the open valley plan. The Georgetown Citizens' Association, however, wanted to fill in the valley for easier access to and from Washington. Thus, several bills submitted to Congress proposed that sections of the valley be filled in to build a road across the creek. Congress took no action on any of the bills. In 1908, a new study analyzed both treatments of the valley. The report called for some kind of parkway: "A park effect of one kind or another is unquestionably the essence of any possible treatment of Rock Creek between Massachusetts Avenue and L Street..." The report suggested four alternatives but favored the full open valley plan with a main drive along the creek. W. J. Douglas, the District Bridge Engineer, also supported this alternative. Still, no immediate action was taken.

Finally, President Taft signed an Act on March 4, 1913 stating that a commission would be established to acquire the land on both sides of the creek to be made part of a parkway. This parkway was to be part of the link between the Maryland/D.C. line to the north and West Potomac Park to the south. Although both the Commission and the parkway were administratively linked with the Park, the parkway never became part of the boundaries. The National Park and Planning Commission, with C. Marshall Finnan in command of the project, administered both the park and the parkway. Once again, however, problems with design, money and land acquisition delayed any action for several more years.

Paving of the parkway began in the mid-1920s with the final section being completed in 1935, and was touted as ranking with the best parkways in the nation. 7

⁴Mackintosh, p. 47-48.

⁵ibid.,pp.85-86

⁶ibid., p. 50.

^{7&}quot;New Parkway Rank with the Finest," The Washington Evening Star. Washington, D.C., April 17, 1936.

The section below Shoreham Hill had been paved by the early 1930s. In 1929, a steel bridge was constructed to cross Rock Creek. By the second half of the decade, the National Capital Parks officials considered the bridge a traffic hazard and pushed for construction of a new bridge. The National Park Service and the Board of Public Works readily agreed as they felt the structure did not fit in with the projected appearance of the parkway. It was therefore decided to remove the bridge and replace it with a concrete and stone structure typical of the new parkway bridges. Both a lack of funding and problems with the plans held up the project. Finally in 1937, the National Park Service and the Board of Public Works allocated a total of \$112,000 for the bridge out of the current roads and trails funds.

The Bureau of Public Roads, in conjunction with the National Park Service, prepared the plans for the bridge and requested bid proposals. Bahen and Wright, Inc. of Washington, D.C. received the contract on December 11, 1937. Construction began on January 25, 1938. As parkway traffic was heavy at this time, the officer in charge worked out a plan to keep traffic moving while constructing the bridge one half at a time. The upstream trusses of the old bridge were removed to build the new arch on this side. Traffic used the old bridge on the downstream side. Once completed, the upstream side opened to traffic and the old downstream bridge was removed to construct the new bridge. This procedure necessitated longer construction time but worked well in handling traffic across the bridge.

Timber sheet piles were used for cofferdams for the abutments, and all footings were dewatered and carried to solid bed rock. Because of the time limit placed on construction, the back fill consisted of a mixture of sand and gravel. Prebatched concrete was furnished by Super Concrete Corporation of Washington, D.C. The aggregate used was a combination of river sand and gravel from the Smoot Sand and Gravel Corporation. The first concrete was poured on February 25, 1938. The cement was furnished by the Medusa Cement Company of York, Pennsylvania and the rock came from Port Deposit Quarry of Port Deposit, Maryland. 10

The bridge is a rigid frame, reinforced concrete arch structure with concrete abutments and wingwalls. The structure's span is seventy-eight feet long and fifty-two feet wide, including two four foot sidewalks. The span of the bridge is approximately ninety feet in length and the total length of the structure from end to end of the parapet wall is 220 feet. It is located on a curve of 990 feet radius with the roadway superelevated. The grade is on a vertical curve with a total rise in the 220 feet of 4.6 feet. The channel of

^{8&}quot;Rock Creek Span is Facing Delay," <u>The Washington Eveving Star</u>, Sept. 13, 1937.

⁹ibid.

¹⁰U.S. Department of Agriculture. <u>Final Construction Report for the Shoreham Hill Bridge</u>. Bureau of Public Roads, 1938, pp. 4-6.

the creek was graded to conform to the new alignment and waterway opening between the abutment faces.

The facing is of mica schist with a blue-grey and buff coloring. Albert D. Batista, of Washington, D.C., furnished the stone from his quarry in Bethesda, Maryland, and from Stoneyhurst Quarry near Cabin John, Maryland, through a subcontract by the general contractor. The cutting and placing of the stone was completed by hand at the bridge site. A sample wall, completed on the site, was approved by the Park and Bureau officials before the first stone was set in May of 1938. It was noted that: "The finished walls present an unusually pleasing appearance both as to color and workmanship." Granite, used for the copings, arch ringstones, abutment faces, corner quoins, and the battered slopes of the exposed portions of the wingwalls, was obtained from Frank Peach Quarries in Granite, Maryland, where they were cut to proper dimensions before shipment. The general contractor completed the placing of the dimensioned masonry.

The structure was completed on November 8, 1938, within a year of the starting date. The lureau of Public Works declared the work satisfactory and commended the contractor for the high quality stonework involved. The final cost amounted to \$102,666.10.¹³ The contractor's superintendent in charge of construction was Mr. Robey. For the Bureau, T.D. Harris supervised the field engineering and Odie Lynch was masonry inspector. The Park Service periodically made inspections.

The design and construction of this parkway bridge followed the trend of new parkway architecture. Parkway structures were meant to "melt into their surroundings" so that they would be harmonious with the scenery. These new standard structures, built of reinforced concrete and faced with stone, complimented the park like atmosphere and became an integral part of the picture.

In 1987 major rehabilitation of this bridge included removal and replacement of the roadway deck, sidewalks and curbs, and repointing of the stone facing on the parapets and face of the bridge and wingwalls. 15

The Shoreham Hill Bridge is significant in its association with the other bridges built while constructing the Rock Creek and Potomac Parkway. It

¹¹ibid., p. 5.

¹²ibid., pp. 5-6.

¹³ibid., p.19.

¹⁴ Robbins, Mary Caroline. "Park Making as a National Art," <u>Atlantic Monthly</u> 1987, p. 88.

¹⁵According to E. Macdougall Palmer, Rock Creek Park, National Park Service.

is similar to most other parkway bridges of the 193Ds, built to blend in with the parkway scheme rather than stand as an entity in itself. This bridge was built to replace an earlier structure that did not compliment this new parkway idealogy and thus stood out along the parkway. The new bridge was built of concrete and faced with mica schist, believed to be the most feasible construction design for parkway bridges.

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